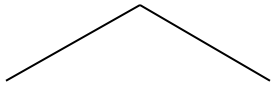
Attachment 1, "Classification 1: Making a Dichotomous Key"

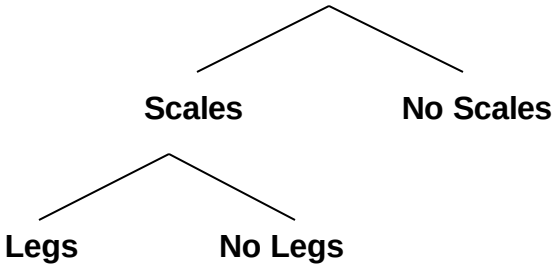
Step-by-step directions to making a dichotomous key

1. Display ten pictures of different plants and animals that are as detailed as possible and that show the complete organism, rather than just a partial or head shot. Ask students to pick a characteristic that could divide the displayed organisms into two groups. The characteristic should be easily observed in the picture, not a type of behavior. The two choices for groups should be opposites. For example: "scales or no scales," rather than "scales or feathers." Physically divide the pictures into the two groups, based on that characteristic, and draw the "branch" for that part of the key.

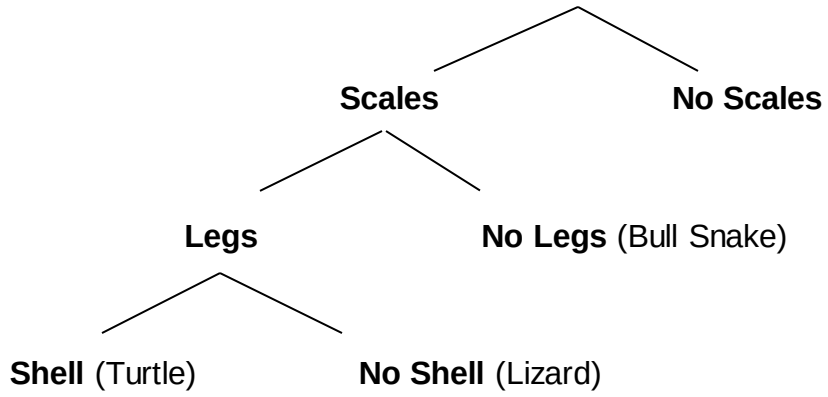


Scales **No Scales**

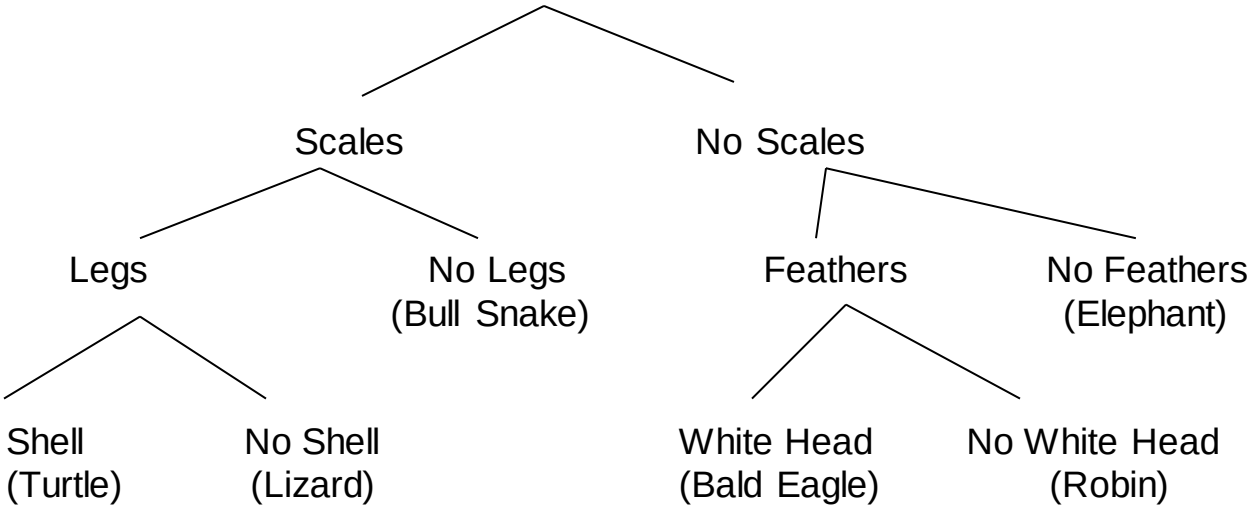
2. Choose the pictures from one side of the branch (for example: all organisms that have scales.) Ask students to pick a characteristic that divides the organisms in that group into an additional two groups. Physically divide the pictures into the two groups based on the new characteristic and draw the "branch" for that part of the key.



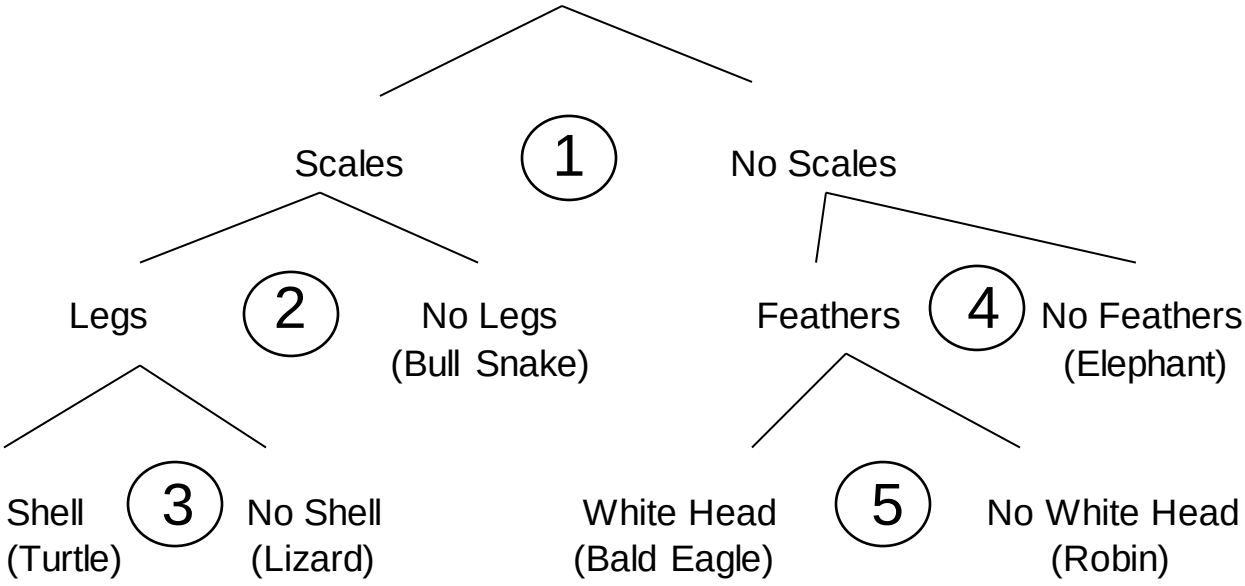
3. Continue down one side of the branching key until only one organism remains. Enter the name of the organism when down to the final thing.



4. Follow the same procedure on the other side of the "branching key." The Key is complete when all organisms have been identified.



5. Add numbers to the branching key by putting a number at the juncture of any choice of characteristics, in order to get the information needed to complete the written part of the key.



6. Create the written key by following the numbers put beside each characteristic. Key is complete when all organisms have been identified.

1. Scales ……..Go to 2
   No scales…… Go to 4

2. Legs……..Go to 3
   No Legs……Bull Snake

3. Shell …… Turtle
   No Shell…….. Lizard

4. Feathers……Go to 5
   No feathers……..Elephant

5. White Head…….. Bald Eagle
   No White Head…… Robin